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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,223	09/17/2003	Jean-Paul Salome	2-1032-214	8466

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YOUNG & THOMPSON
745 SOUTH 23RD STREET
2ND FLOOR
ARLINGTON, VA 22202

EXAMINER	
MONDESI, ROBERT B	
ART UNIT	**PAPER NUMBER**
1653	

DATE MAILED: 03/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/666,223	SALOME ET AL.	
	Examiner	Art Unit	
	Robert B. Mondesi	1653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *January 30, 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *14-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 29, 2005 has been entered.

Status of the claims

The status of **claims 1-13** should be canceled and not withdrawn. In amendment filed November 29, 2005 the applicants have indicated that the claims are withdrawn; however this is in contradiction to the statements made in the response section of the amendment that indicate the status of the claims a being canceled. The examiner will treat the claims as canceled according to the applicants' statements in the response section of amendment filed November 29, 2005 and because there is no reason why the claims should be withdrawn since they were previously canceled in amendment filed June 14, 2005.

Claim 25 is new. **Claims 14-25** are presently pending and under examination.

Information Disclosure Statement

The IDS filed January 30, 2006 has been received and is signed and considered, a copy of the PTO 1449 is attached to the following document.

New Objection(s) and Rejection(s)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 14-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nickel United States Patent No. 5,034,227 in view of Jianhua et al. (Cited in the IDS filed January 30, 2006) in light of Ferro et al. United Sates Patent No. 6,555,003, Fitt et al. United Sates Patent No. 5,346,892.

Nickel teaches that his invention relates to a process for preparing products from legumes and more particularly it relates to a process for the separation of one or more protein products and one or more carbohydrate products from legumes such as peas and beans (Column 1, lines 7-11).

Nickel teaches further that The legume seed used as starting material for the above process may be peas or beans, or a mixture of said peas and beans. A preferred starting material is yellow field peas and suitable varieties of peas are Trapper, Century, Flavo, Victoria and First & Best, while suitable varieties of beans are Diana and Ackerperle (Column 1, lines 52-55) and that the starting material in the form of an aqueous suspension containing finely ground or powdered legume seed may be prepared in any manner suitable for, or convenient for, the handling of such legume seed. Thus, for example, the seed, which may or may not have been subjected to a preliminary treatment to reduce the moisture content thereof, may be finely ground, in the dry state, by the use of dry milling equipment. The powder or flour so obtained may then be suspended in an aqueous medium at the appropriate pH to provide the required aqueous suspension (Column 1, lines 55-65).

Nickel also teaches that at this point, the starting material being prepared is in the form of clean, dehulled seed, optionally having a reduced moisture content, which contains as its major components, starches, proteins, sugars and a certain amount of fiber (Column 2, lines 10-14) and the clean, dehulled seeds are then ground into a powder or flour and such grinding may be carried out by a dry milling procedure, for example using a high energy mill, to produce a flour which will permit relatively easy dispersion in water. The powder or flour from the ground seed may be suspended in a chemically treated aqueous -medium at ambient temperature and the ratio of water to flour may conveniently be from about 3:1 to about 10:1 by weight (Column 2, lines 23-27).

Nickel teaches that Dehulled dry yellow field peas seeds (Variety: Century) having a moisture content of about 7% by weight are dry milled in an Alpine pin mill until a pea flour or powder is obtained having a particle size within the range of about 80 to 120 mesh, the flour being able to pass conveniently through a sieve of 100 Mesh (Column 5, lines 47-52).

Nickel teaches that the aqueous suspension, as a slurry or fine dispersion, containing a substantial proportion of proteins in solution, is then subjected to centrifugal action to separate the mixture into a so-called liquid fraction and a solid fraction. A suitable decanter or horizontal type centrifuge, such as a Sharples Pennwalt Series P super decanter centrifuge, or a series of hydroclones, such as a Dorr Oliver hydroclone, may be used as a result of this centrifugal action, there is obtained a low solids content overflow portion, a so-called liquid fraction, containing essentially soluble proteins with some sugars, and a high solids content underflow portion, a so-called solid fraction, containing essentially insoluble starches with some insoluble proteins, and fibrous material (Column 3, lines, 44-56).

Nickel also teaches that the liquid fraction or fractions from this separation procedure contains essentially soluble proteins and any insoluble solid material therein may be removed by means of an additional centrifugation operation to separate fibrous material, degraded starches or insoluble proteins. The liquid fraction thus remaining is generally at a pH within, the range of about 8.0 to about 9.5 and therefore requires adjustment of the pH to a figure of about 4.4 to 4.6 (isoelectric point) in order to coagulate and precipitate proteins. This may be achieved by the addition of an acid,

such as hydrochloric acid, in order to adjust the liquid fraction to a pH of about 4.4 to 4.6. At this point, the proteins coagulate and precipitate into a solid form. This solid form of proteins may conveniently be separated from the remaining soluble sugars by subjecting the mixture to centrifugation, for example by use of a deluding type of centrifuge commercially available as a Westphalia or DeLaval centrifuge. The solid protein portion thus obtained can be retreated, if desired, by reslurrying in 3-5 parts water with adjustment of the pH again to a figure of about 4.4 to 4.6. After further centrifugation, the solid protein product so obtained consists essentially of proteins with little or no sugars and is relatively free from odor or flavor (Column 4, lines 60-67 through column 5, lines 1-15).

Nickel does not specifically teach that the equipment used in the process for extracting and refining the components of pea are specifically also used in an industrial potato starch factory.

Ferro et al teach that vertical stacked disk centrifuge of the type sold by Westphalia, Inc. is used in a potato starch factory for the treatment of potato (Column 4, lines 7-12).

Fitt et al. teach The starting material starch used in accordance with the present invention can be derived from various cereal and root materials including corn, milo, wheat, rice, arrowroot, beet, potato, tapioca, waxy corn and waxy milo. Granular corn starch which is made in the corn wet-milling process is preferred because it is readily available, inexpensive and relatively pure as it is produced so that it does not have to be

heavily refined after it comes from a corn-wet milling plant (Column 4 lines 11-15) and that the preferred means of starch slurry washing is with the use of hydroclones. Suitable hydroclones are DORRCLONES, manufactured by Dorr-Oliver Incorporated, 612 Wheeler's Farm Road, Milford, Conn. 06460, U.S.A. Hydroclone washing can be carried out in one stage or, preferably, in several stages in series. FIG. 2 illustrates an embodiment with three hydroclones in series, but more can be used if desired. Solubles are removed in the overflow by concentrating the insoluble material from the supply by a factor of about two in the underflow (Column 5, lines 59-66).

Jianhua et al. teach that the production of pea starch in conformity with quality requirenemnts of vermicelli industry from pea by means of a separation and extraction technique using rotary washing screens, disk centrifuges and hydroclones as main equipment indicates that the conventional acid slurry method for the producing pea starch can be replaced the modern starch production process which may enlarge the scale of starch production improve the quality of the product and reduce the amounts of consumed water and waste water and one of the advantages of the process is to provide a new protein resource for the food industry by recovering pea protein (Page 6, paragraph 4, lines 1-5 through page 7, lines 1-4)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use industrial starch equipment for the treatment of potato in a process for extracting and refining the components of pea for the advantages of enlarging the scale of starch production, improving the quality of the product and

reducing the amounts of consumed water and waste water as taught by Nickel, Jianhua et al., on light of Ferro et al. and Fitt et al., see Jianhua et al. at page 7, lines 1-4.

Conclusion

No claims are allowed

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert B Mondesi whose telephone number is 571-272-0956. The examiner can normally be reached on 9am-5pm, Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jon Weber can be reached on 571-272-0925. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Robert B. Mondesi
Patent Examiner
Group 1653
Robert B Mondesi
3-27-06

JON WEBER
SUPERVISORY PATENT EXAMINER